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EXHIBIT DOMESTIC PRODUCTION AT FAIR;  
PRODUCE NEW BEARING ALLOYS

EMPHASIZE MACHINE-BUILDING INDUSTRY -- Rabotnichesko Delo, 4 Sep 50

The displays shown at this year's International Fair in Plovdiv strongly emphasized the domestic machine-building industry. Among the machines manufactured for the first time by the national industry were heavy, substantial lathes more than 2 meters long, precision lathes, the latest types of milling machines, hydraulic presses, and others.

Visitors showed much interest in the new baking machinery, aimed to make baking an entirely mechanized process; the machines were manufactured by the Progres machine building plant. A milling roller, also on display, was manufactured by the Vaptsarov plant. Furthermore, the exhibits included a grape-crushing machine, a pitting machine, automatic washers, a powerful pneumatic hammer, electric and gas compressors, brick-pressing machines, diesel engines of 15 horsepower, grinding machinery, spreading machines, refrigerators, pumps, spare parts, etc.

Among the agricultural machinery, the most noteworthy were various threshing machines, including grain, corn, and sunflower threshers; hay balers, ordinary and tractor plows, disk harrows, etc. Indicating agricultural machinery production in 1947 by a basic figure of 100, production reached 187 in 1948 and 259 in 1949, and it will reach 612 by the end of 1950.

Construction machines were also manufactured domestically, and the displays showed concrete mixers with a capacity of 250-500 liters, conveyer belts, excavating dredges, etc.

Metalworking also made remarkable progress during last year; many scores of metal articles were on display, ranging from strainers, saucepans, and tea-kettles, to metallic cash boxes, beds, stoves, etc. A new type of stove is designed for low-calory fuel, especially lignite.

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The coal industry was represented by a great number of exhibits, which showed that coal production, indicated by 100 in 1947, rose to 103 in 1948, and to 125 in 1949, and will reach 132 by the end of 1950. The State Mining Organization exhibited six kinds of brown coal, three kinds of lignite, and other types of coal. The exhibits of the Ore and Metallurgy State Mining Enterprise were drawing much attention, as these products now hold one of the first places in Bulgarian exports, and include iron and copper ores, lead-zinc concentrates, pyrites, etc. The production of these ores has considerably increased.

Consumers' goods were also well represented at the fair, and the main assignment of this industry, to increase assortments and improve quality, has been largely fulfilled. The textile pavilion was very impressive, showing a great variety of woolen and cotton fabrics, and huge cotton bales from the USSR, to remind the visitors that Bulgarian industry could not have attained its high level of progress without the aid of the USSR. The walls of the pavilion were hung with the portraits of the most outstanding women shock workers of the industry.

USE SOVIET CASTING FORMULAS -- Sofia Rabotnichesko Delo, 7 Sep 50

The engineers and workers of the bronze-casting department of the Georgi Dimitrov Locomotive and Railroad Car Plant in Sofia, after numerous tests and surveys and with the aid of a special formula received from their Soviet technical supervisors, have arrived at a new system of casting bronze alloys with a lower tin content. The directions of Soviet engineer Kovalskiy and the immediate aid received from Transportation Minister Georgi Chankov have substantially facilitated the manufacture of the new alloy.

After a number of continuous tests under various temperatures, the alloy finally was poured into a bearing case and proved to conform to very high technical standards. From then on, entire locomotive bearings were cast from the new alloy, and the locomotive, now in operation for 4 months, has not suffered from a single defect. Since 15 June 1950, the plant has been using the new alloy with low tin content exclusively and savings from the new method already amount to 80 million leva yearly.

At present, plant engineers Stoyanov and Popov are conducting tests to produce bronze locomotive fittings with a minimum of tin. Results have been most gratifying. Another engineer at the plant, Ivan Minkovski, after extensive experiments has produced a new calcium-sodium-lead alloy free of tin. The first bearings of this new alloy were cast 10 January 1950 and installed in a passenger car. The car is still in operation without having suffered the slightest defect.

However, some of the materials used for bearings manufacture are imported and are in short supply. Therefore, engineer Minkovski continued his experiments, and on the basis of Soviet experience, produced an alloy from domestic materials. The new tin-free alloy is now being used for bearings on railroad cars, locomotives, streetcars, and automobiles. Engineer Minkovski is still trying to improve the resistance of the new product and to shorten the technological procedure.

The bearing alloys manufactured in 1949 cost 400 to 2,000 leva a kilogram; the alloys produced by engineer Minkovski cost only 150 to 200 leva a kilogram, and production based on the new material will save hundreds of millions of leva for the country's economy.

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INTRODUCE NEW EFFICIENCY METHODS IN GABROVO ENTERPRISES -- Sofia Izgrev,  
16 Aug 50

In their struggle to improve the production process, 46 workers and foremen of enterprises in Gabrovo have submitted suggestions for new efficiency methods. Foremen of the Ivan Lyutskanov factory have introduced a mechanism whereby six knitting machines yield an average production of 80 kilograms in 8 hours, whereas previously ten machines driven by hand were needed to produce the same amount. The new method has also provided a saving of 948,000 leva per year, and the plan was fulfilled with 40 workers instead of the 65 required heretofore.

In the Khristo Botev factory, a method has been adapted for the air-blast cleaning of cylinders. The foremen and workers of the Uspekh factory have re-centered a wool-combing machine on a new system, thus increasing daily production from 90 to 180-200 kilograms. During a technical contest held at the same factory, one of the workers initiated the cleaning of boiler scale from steam boilers by means of rust-preventive liquids. Fifty-five tons of coal have already been saved by the new method, which also prevents the withdrawal of boilers for cleaning purposes. Heretofore, these operations had to be carried out four or five times a year and wasted 16-20 workdays.

Various other efficiency methods have been adapted in the plants and factories of the city.

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